

ABSTRACT OF THE DISCLOSURE

A cold forging apparatus for forming complex shapes at a single station includes a plurality of multiple function punch assemblies disposed on intersecting axes. Each of the multiple function punch assemblies includes an inner or a center punch and an outer or ring-shaped punch surrounding and in sliding contact with the inner punch. The apparatus also includes a die holder for positioning a mass or slug of metal between the punches. A computer system controls movement of the punches and is programmable to form parts of different shapes at a single station. Off axis punches and angularly offset punches and an additional punch or punch assembly are also disclosed.

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